



SERTIS

A member of ANDERSEN CONSULTING



From Idea to Action: How African Business Can Start and Scale AI Initiatives

Knowledge Management AI (KMAI) and Private LLM

Get Started with Proven Enterprise AI Solutions



The Era of AI

What is AI

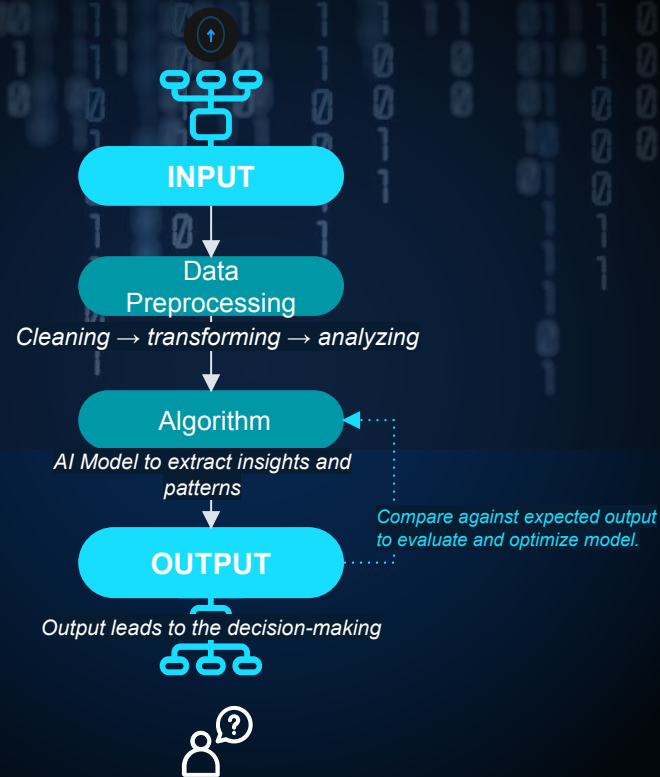


AI Definition

Artificial intelligence, or AI, is the creation of computer systems that are capable of performing tasks that generally require human intelligence, such as problem-solving and decision-making.

In order to imitate intelligent behavior and enhance performance over time, algorithms and data are utilized.

It's all start with...."Data"



AI: The Fundamentals of the Data Layer

Why the Data Layer Matters?

The data layer underpins all of AI: data that's clean, structured, and accessible. Enabling reliable analytics and making AI deployment possible. Without it, advanced solutions cannot succeed.

*Effective
Data Foundation Case
Studies*



Data Lake & Data Warehouse Development

Developed a data Lake and data warehouse solution optimized for reporting and analysis, driving insights and improving decision making for a major wholesale retailer.



Data Unification & Data Warehouse Development for a Conglomerate

Identified more than 50M+ unique customer keys and built the largest consolidated customer data warehouse for retail business in Thailand with a scalable architecture

Typical Enterprise Challenges

Fragmented Infrastructure



Lack of centralized or scalable data systems hampers integration and usability.

Limited Readiness / Skills



Many enterprises lack proper data tools/ internal expertise to manage data effectively.

AI Readiness Barrier



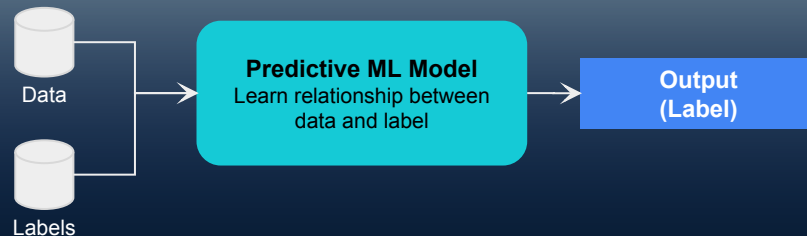
Without high-quality, accessible data, deploying AI remains impractical and high-risk.

Introduction of Generative AI & Predictive AI

Deep Learning Model Types

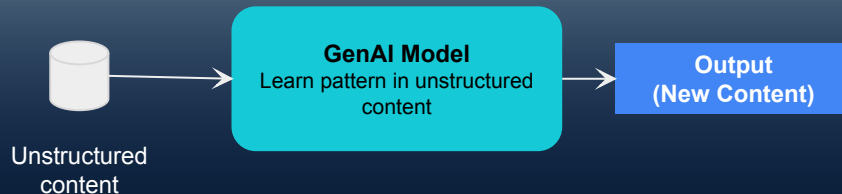
Predictive

- Used to classify or predict
- Typically trained on a dataset or labeled data
- Learns the relationship between the features of the data points and the labels



Generative

- Generates new data that is similar to data it was trained on
- Understands distribution of data and how likely a given example is
- Predicts next word in sequence



AI has a Powerful and Rapid Effect on Enterprise P&L

AI Can Drive Enterprise-Wide Economic Impact

Immediate and Deep
Productivity Boost

Reduction in Human Error
Improve Quality

Harvest New Income Streams
Revenue Boost

Unlocked Door
New Capabilities

Results from AI Drop Quickly to the Bottom Line



+1:
Redefines
traditional business systems

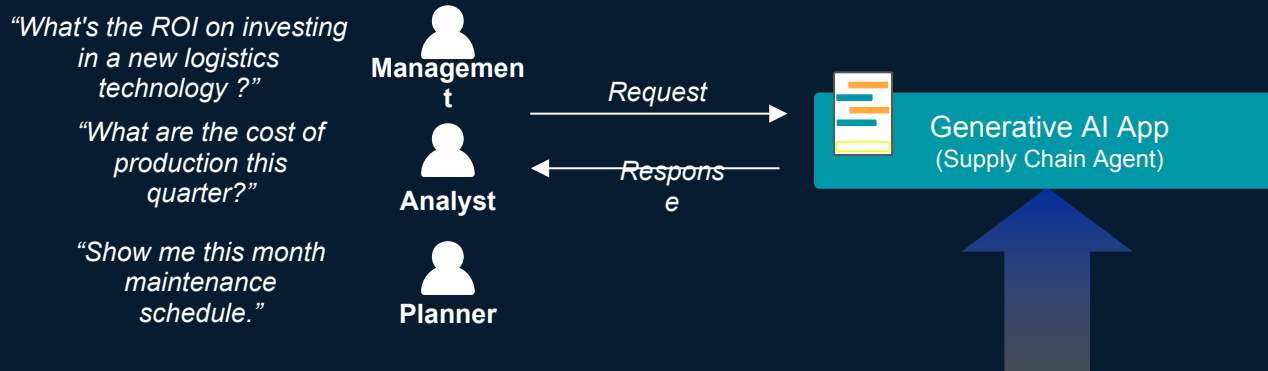
Generative AI's potential lies in its ability to not only redesign task or process level, but also reimagine entire systems of organizations



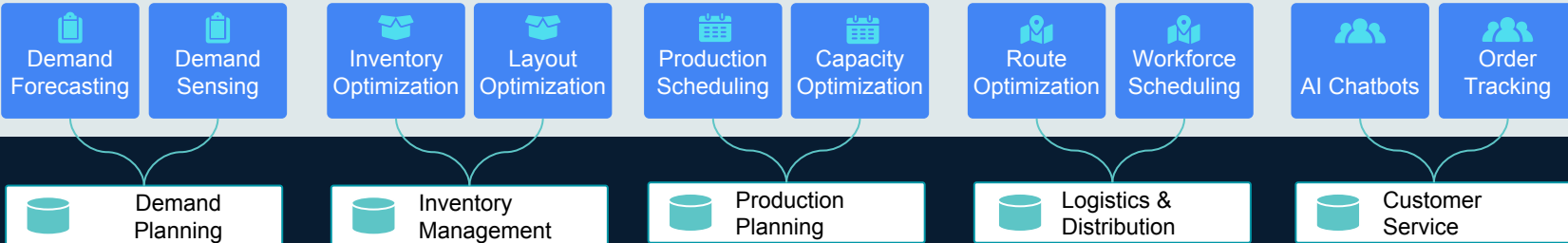
+1:
Reshapes
competitive landscape

Disruption will favor innovators, and the superstar who quickly adopts will dominate the industry and outpace their competitors in productivity and profitability

Generic Example: Predictive AI & Generative AI Along the Supply Chain



Data & PredAI Solutions



Specific Examples - Retail



Demand Forecasting

Forecast demand for each SKU using Statistical or ML Models, enabling other optimization use-cases.



Promotion Effectiveness

Quantify the impact of promotions and optimize mechanics per customer and product group.



Customer Segmentation

Group Customers based on shared characteristics, preferences, behaviors, etc.



Product Recommendation

Predict interest score for every customer and product combination.



Assortment Optimization

Recommend the right products for each store.



Store Clustering

Choose BEST NEW LOCATION; Group similar stores based on similar attributes or characteristics.



Personalization

Identify patterns and preferences unique to each customer and generate tailored content or products that meet their needs.



Cross-Sell Rules Mining

Quantify the relationship or "Lift" between two products using Apriori Rules Mining.



Category Decision Tree

Recategorize products using network analysis & clustering models and visualize category hierarchy that represents customer decision-making.





KMAI

Knowledge Management AI

**Drive Enterprise-Wide Efficiency
Through a Single Source of Truth**

Processes are Slower than Need Be, Prone to Error, Susceptible to Knowledge Loss, and Sub-optimized

Unstructured Data (Documents, etc) is “Unorganized & Everywhere”

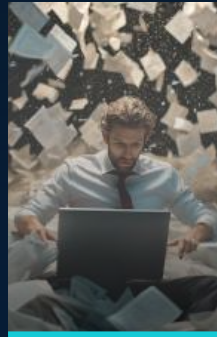
Productivity Trap



Multiple teams across the enterprise stuck in repetitive, time-consuming tasks



Gathering scattered data is not optimal and on strategic, high-impact work leads to “misses” and error



Lost time limits focus on strategic, high-impact work

Insight Gap



Are some teams behind other teams? Redundant work, analyses?

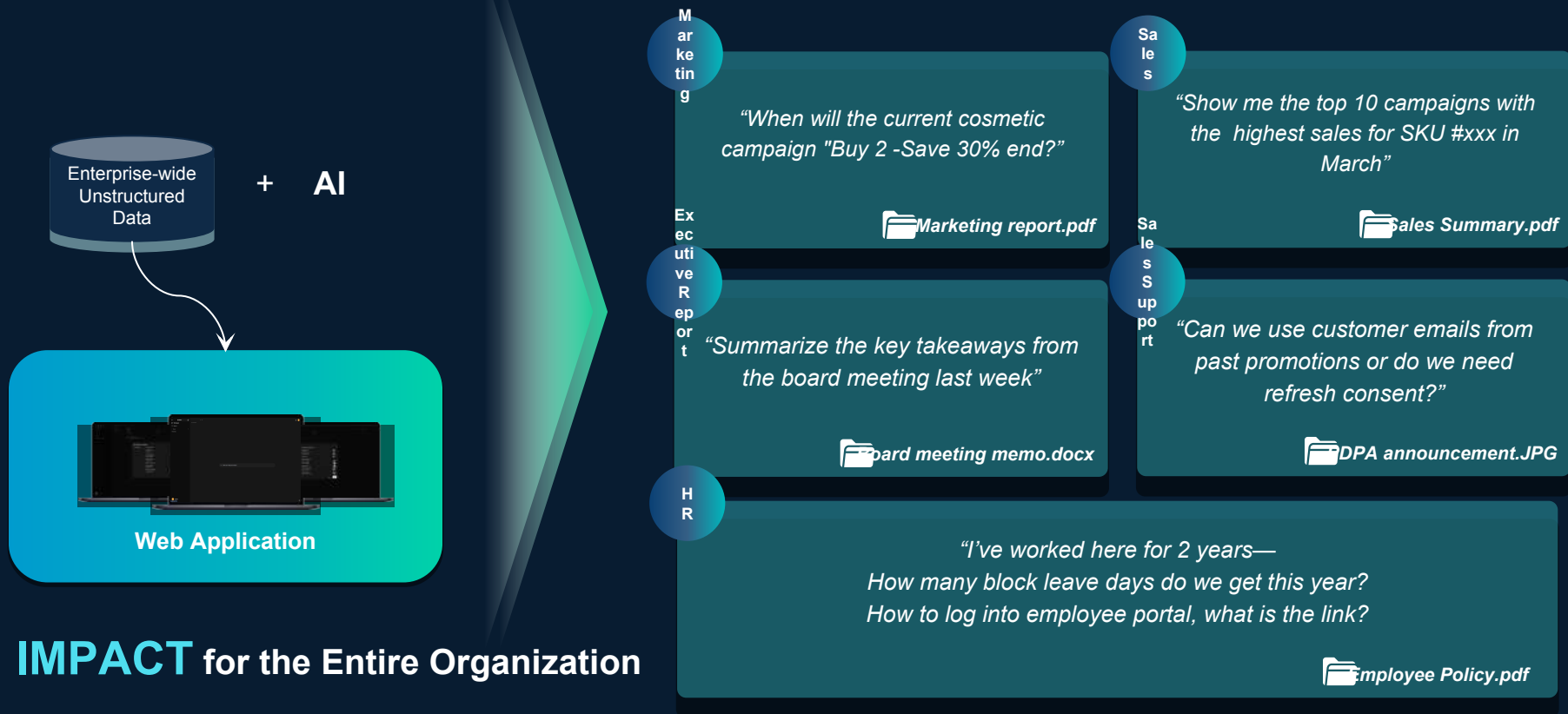


Irrelevant output stalls decision-making and thwarts the business case



Missed insights weaken work output and ultimately competitive advantage

Imagine What would be Possible with an Always-on, QA AI Assistant that Knows All your Unstructured Data?



IMPACT for the Entire Organization

Enhance your organization's Knowledge Management Cycle with AI

Knowledge Management AI (KMAI)

Insights Report with Reference Sources

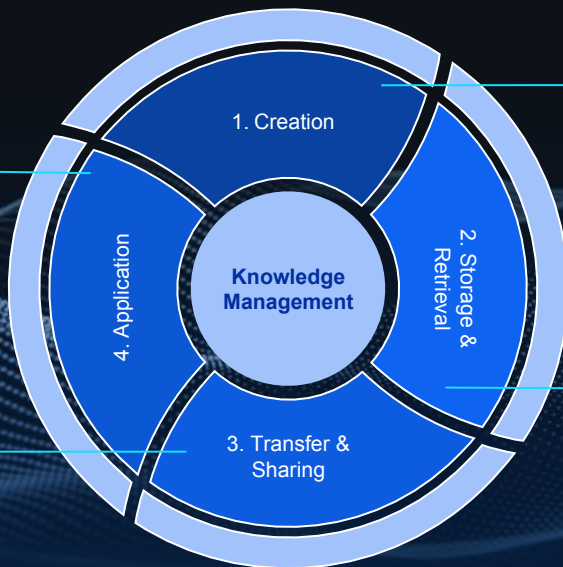
Customizable result in dashboard report
XLSX/CSV exports, able to provides source references

User Management & Access Permission

Manage employee access based on authorization
Alert management for unauthorized inquiries and repetitive questions
Blacklist specific words and topics

Multi-lingual Support

Support interactions in multiple languages, able to respond in the same language as question



AI-powered Document Generation

Increasing speed of report generation, turn draft outlines and information into finished reports

Ingest Internal & External Sources in Multiple Formats

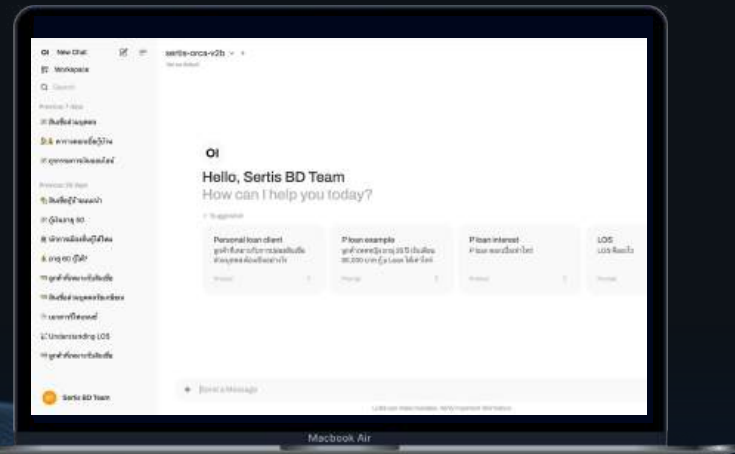
Multiple simple ways to add documents or external sources to the organization database Multiple document formats support. Including URL search for external source of knowledge.

Retrieve Knowledge by a Semantic, LLM-powered Chatbot Interface

Tune the most advanced, multiple LLMs for the specific industry AND the specific company, leading to better performance

Knowledge Management AI

Streamline workflows, enhance research capabilities, and boost productivity



Semantic Search Optimized for Company and Industry

We tune the most advanced LLMs for the specific industry AND the specific company, leading to better performance

Compliance Alert Setting

Manage employee access based on authorization and alert management for repetitive or unauthorized inquiries

Multiple Information Ingestion Methods

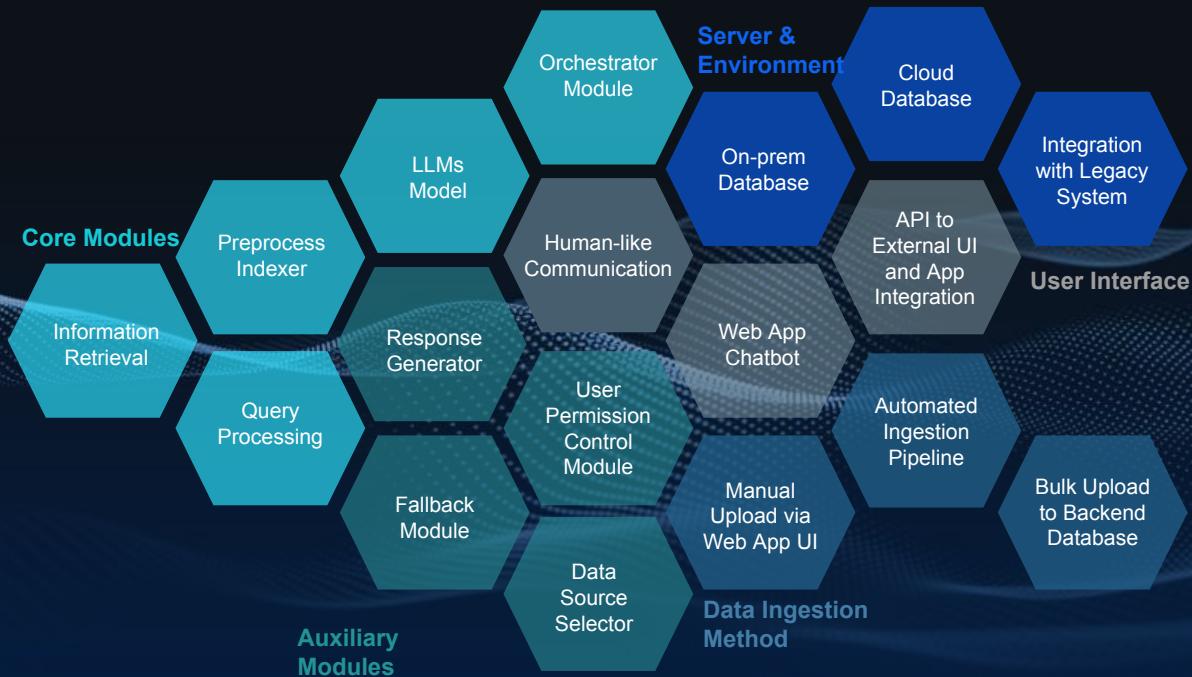
Multiple simple ways to add documents to the organization repository

Ensure Your Data Stays Secure Within Your Organization

We use a bespoke encryption method to ensure your data is never directly shared with the LLM provider

Features for Enterprise Deployment

Flexible LLMs & Technology stacks



Technology Stack Options



LLM Options



Supporting Service Options



Supported File Format



With more added monthly ...

Accelerating Enterprise-Wide Efficiency with Reliable, Real-time Updated Information

Case Study: Knowledge Management AI at a Leading Thai Bank

Business Challenges



The bank needed to **boost work efficiency and accuracy across the enterprise** whilst having bank-centric, real-time information and industry-tuned, fast response KMAI

Solution

Bank product information

Company Policy

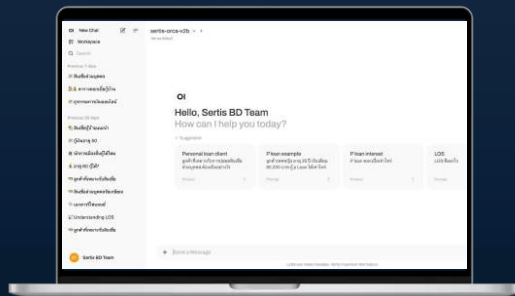
Market Research

Bank Regulation



SERTIS

Knowledge Management AI



Support 1,500 banking users
Ask anything on the interface
Enable users from multiple teams

Results



Enhanced employee productivity
by streamlining tasks, accelerating research speed and accuracy, and comprehensive information access for improved decision-making



Improved branch staff sales processes
by recommending consistent product programs, better sales pitches, and real time results, driving **+12% to conversion rates and higher CSAT scores**



Reduced bank liability
By ensuring consistent sales process, eliminating "mis-selling" across all branch employees, eliminating knowledge gaps

Knowledge Management AI

Your KMAI Adoption Journey: From Pilot to Production

1
Execute NDA



Sign Non-Disclosure Agreement to start collaboration

2
Submit Data Samples



Sample documents that reflect the variety of topics and formats in your organization

3
POC Delivery (2–4 weeks)



Sertis delivers initial Proof of Concept via web UI; test and choose among LLMs, optional features

4
Customer Testing (2 weeks)



Customer tests and evaluates the KMAI

5
Review & Feedback (2 weeks)



Review & gather feedback; fine-tune the solution, further train the KMAI on acronyms, etc.

6
Prepare Statement of Work



Draft project-based SOW for full implementation; develop implementation plan, cross-work with client tech teams

7
Contracting



Full scope contract

8
Project Execution



Begin full project execution (4 weeks on avg)



SERTIS Private LLM

**Gain the Full Power of an LLM and KMAI that is Secure, Autonomous,
and Tailored Directly to your Enterprise**



AI Problem Statement

Enterprises Need LLMs to Boost Productivity, but Cannot Accept the Data Security Risks

We Need to Use LLMs and AI in our Daily Operations...



Opportunity to Reduce Error and Cost across Enterprise Processes

LLMs and AI are essential to **reduce error and cost** in compliance, data synthesis, internal and external report generation, knowledge sharing, and all Single Source of Truth Initiatives



Opportunity to Increase Productivity

LLMs and AI deliver significant **productivity gains** across the enterprise, creating a strong competitive advantage

...but Public LLMs Compromise Enterprise Data Privacy and Security



Sensitive Data Vulnerabilities

- All forms of enterprise data are prime targets for exploitation by malicious actors
- Public LLMs such as ChatGPT, Gemini, and Claude are often not compliant with corporate data security policies, posing significant risks to sensitive information



Employee Use of Public LLMs = Security Risks

- Employees using public LLMs for work may unintentionally expose sensitive data to an international knowledge-sharing platform
- It is nearly impossible to guarantee that employees are not using personal LLM accounts to perform company-related tasks



Risk is Constant and Likely Catastrophic

- Mishandling or accidental exposure of sensitive data can result in catastrophic business risks
- Only zero-trust protocols and strict SOPs can ensure data security

Public LLMs Are a Growing Threat to Enterprise Security

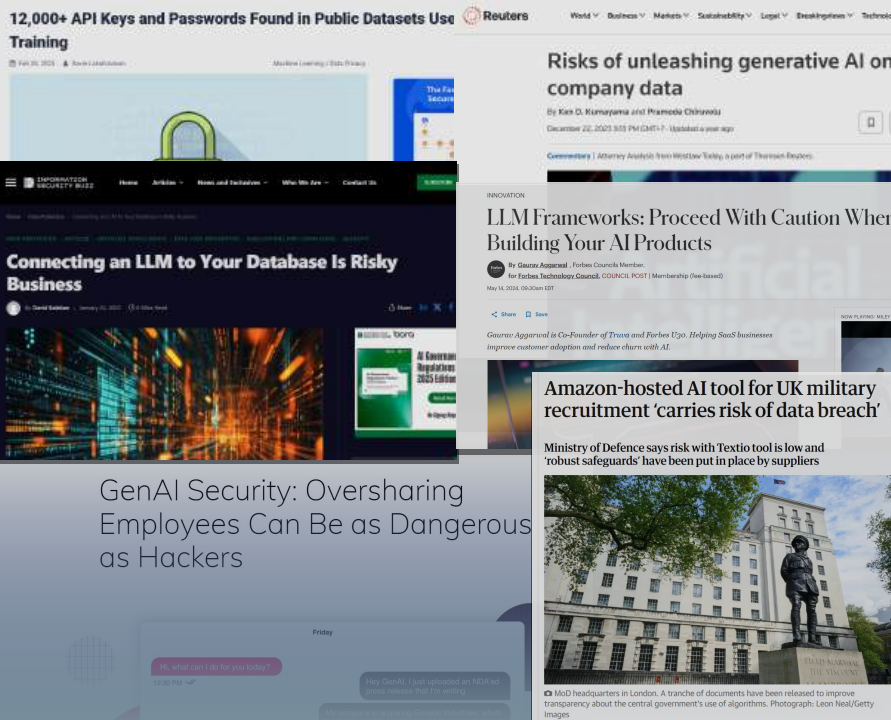
22 Billion

Data records “inadvertently found their way onto LLM training in 2024”

“Representing a twofold increase from the previous year, employees are inputting sensitive data like clinical notes into LLM tools not realizing that once information is entered, it's absolutely used to train models. Plus these LLMs actively search for the data all over the internet including emails. The risk extends beyond individual users to corporations.”

Forbes, 2024

GenAI Security: Oversharing Employees Can Be as Dangerous as Hackers



Instances of private customer information cost over \$200 per record. Since a growing number of companies turn to AI models for data management and task automation, the risk of a data breach increases even further.



[Recent research](#) shows how easy it is to retrieve private user information such as emails and passwords from public AI model training data.



SERTIS
Private LLM

Make All your AI Tools Powerful

Enterprises Gain AI Advantages while Avoiding the Risks Associated with Public LLMs



Secure and Autonomous LLM

On your premises or in your cloud, gain your own secure (air gapped) autonomous AI system capable of managing sensitive information and driving productivity while avoiding the risks associated with external networked public LLMs.

Enterprise Security Options for Private LLM

Private

Use software set-up for Private LLM with major cloud providers (AWS, MS, Google)

Suits strict security environments

Vault

Hardware solution fully on-premise with no cloud access

For maximum data sovereignty and control





SERTIS Private LLM

*Encryption, access control, intruder
detection and alerts, compliance
administration tools*



Software Capabilities

Natural Language Processing (NLP)

Advanced capabilities for text analysis, summarization, translation, and generation.

Data Management

Secure and efficient handling of sensitive data, with robust data governance and compliance tools

Plug & Play on your Network

Minimal set up - API-ready for quick adoption into existing workflows. Scalable performance optimized for enterprise environments



Operations Capabilities

Pre-Built User Interface

Intuitive and user-friendly interface for easy interaction and management of the system

Easy Integration to Workflows

Includes IT infrastructure and work processes, easy hardware maintenance by IT Team

Flexible Architecture

Fully on-prem or combination of secure outside Data center and non-public cloud deployment, fits into any existing IT infrastructure and intercompany off-net networks

Software Updates Available

Stay ahead with the latest AI improvements and optimizations after-sale support*

Flexible Business Model

Hardware Deployment Options

Choose between owning, financing, or leasing hardware to best suit your business model and operational flexibility

Simple Pricing Model

One-time training and setup fee with a predictable monthly payment – includes all future upgrades, feature enhancements, and optional performance tuning*

The Pathway to Successful AI Deployment

Despite AI's Attractiveness, Sertis Observes Self-Inflicted Pitfalls Hindering AI Adoption & Deployment

1 Poor Strategy and Data Readiness

Misaligned goals and disjointed internal effort weakens data preparation, causing “GIGO” inefficiencies.



2 Miscalculated ROI

Overlooking cross-functional KPIs from Financial to Legal to Operational, or failing to look at process integration of AI deployments, can lead to ROI miscalculation.



3 Fragmented Approach

Focusing on isolated AI use cases creates usage silos, limiting scalability and weakening alignment with organizational goals.



The Optimal Pathway to Successful AI Deployment & High ROI

1. Identify Business Problems

Define key business challenges and pain points that AI may help solve

3. Designate an AI Champion

Appoint a cross-functional leader to guide decisions, ensure collaboration, and drive the initiative (Finance, Legal, Tax, Ops, Marketing)

5. Engage an Experienced AI Partner

Align technical and business priorities through meticulous requirements gathering and detailed data layer analysis, ensuring seamless integration and scalable solutions

7. Implement and Monitor Effectively

Deploy the solution with continuous monitoring to resolve challenges and ensure optimal performance

2. Establish Clear Objectives

Set measurable business outcomes aligned with strategic goals for AI initiatives; can other non-AI solutions also work?

4. Foster Internal Alignment

Align stakeholders by addressing KPIs, IT integration, compliance, and ROI goals upfront

6. Proposal Preparation

Collaboratively develop a detailed plan covering technical and business requirements, data integration needs, iterative releases, and ongoing support

8. Optimize and Scale

Refine processes, leverage vendor expertise, and scale AI deployment to maximize enterprise value

ROI: Measuring AI's Impact on Enterprise

Current ROI Landscape



Cost Savings

AI automation reduces manual labor and operational expenses, increasing efficiency



Revenue Growth

AI-driven personalized services and products boost sales and customer retention



Risk Mitigation

AI detects and prevents fraudulent activities, safeguarding assets



Operation Efficiency

AI streamlines workflows, reduces errors, and optimizes processes



Scalability

AI enables business expansion without proportional cost increases



Competitive Advantages

AI-driven innovation accelerates product development and market leadership, new capabilities; "AI is IA"

The GenAI Success Case: A fintech startup

Measurable Benefits Always Underpin the AI ROI Case

The GenAI Solution

Enhance trade operation productivity using **optical character recognition (OCR)** and **LLMs** to digitize and interpret information from various trade documents



Productivity Gains

Number of trade documents processed per day:

300 Documents

67 %

500 Documents



Cost Savings

Manual Labor Cost Saving

-\$250,000

**Annually from
Reduced Staff Hours**



Error Reduction Rate

Number of errors per 1,000 processed documents:

15 Errors

-80 %

3 Errors



Time Savings

Time required to process documents:

3 Days

-92 %

6 Hours



Return on Data

Data utilization rate:

60%

Historical data leveraged

+50 %

90%

with advanced AI prompts.



10 Years in Thailand
400+ AI and Data Deployments
2 JVs, 2 Spin-offs
Global Top 20 Ranked CV AI



SERTIS

Sertis Co.,Ltd. (Head Office)

597/5 3rd Floor Suite 302 Sukhumvit
Road,Khlong Tan Nuea, Wattana Bangkok,
Thailand 10110

Tel: +66 2001 1893

Fax: +66 2001 1894